

Media Contact: Jared Sagoff
(630) 252-5549
jsagoff@anl.gov
For immediate release

New Argonne microscopy facility combines cutting-edge science, green architecture

ARGONNE, Ill. (Nov. 19, 2009) – The U.S. Department of Energy's (DOE) Argonne National Laboratory is more than just a hub of prizewinning science. It's also the home of award-winning – and green – architecture.

The laboratory's recently completed Sub-Angstrom Microscopy and Microanalysis facility (SAMM), received a Federal Water and Energy Management Award from DOE. The award, the only one given to a DOE national laboratory, recognized the efforts of Argonne's architects and engineers in designing a laboratory that was simultaneously scientifically cutting-edge and environmentally friendly.

The actual sub-angstrom microscope sits on a massive concrete island that must remain isolated from any vibrations in the surrounding environment. Because the resolution of the instrument is so fine – smaller than the diameter of a single atom – the slightest disturbance could ruin an entire experiment.

To prevent this from happening, any external vibrations are serially dampened through a number of different materials so they do not affect the microscope. "It's the best building in the world for this type of science – that's what's most important," said Argonne architect George Norek. "I'm proud that we were recognized for our work to make it sustainable and energy efficient, but that would mean nothing if this building weren't up to snuff for research."

--more--

New Argonne microscopy facility – add one

Scientific users and other architects have come from around the world to visit the SAMM facility to learn from its design. "If you take the right approach at the beginning, you can design a green building at no or very little additional cost," Norek said. He pointed to the laboratory's use of water conservation fixtures, preferred parking for carpools and high-efficiency vehicles, native landscaping and locally produced, recycled drywall as some of several measures that both held down cost and mitigated the facility's environmental impact.

The laboratory has also submitted the SAMM facility for Leadership in Energy and Environmental Design (LEED) certification from the U.S. Green Building Council, and Norek expects the building to achieve LEED Gold certification.

Argonne National Laboratory seeks solutions to pressing national problems in science and technology. The nation's first national laboratory, Argonne conducts leading-edge basic and applied research in virtually every scientific discipline. Argonne researchers work closely with analysts from hundreds of companies, universities, and federal, state and municipal agencies to help them solve their specific problems, advance America's scientific leadership and prepare the nation for a better future. With employees from more than 60 nations, Argonne is managed by [UChicago Argonne, LLC](#) for the [U.S. Department of Energy's Office of Science](#).

#